



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,352	05/15/2006	Peter Noest	01012-1034	6264
30671 7590 05/29/2008 DITTHAVONG MORI & STEINER, P.C. 918 Prince St. Alexandria, VA 22314				
EXAMINER VUONG, QUOC HIEN B				
ART UNIT 2618		PAPER NUMBER		
MAIL DATE 05/29/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/562,352

Applicant(s)

NOEST ET AL.

Examiner

Quochien B. Vuong

Art Unit

2618

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-893)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to applicant's response filed on 02/14/2008. Claims 1-4 and 7 are now pending in the present application. This action is made final.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7, recites among other limitations "...the mechanical changeover switches are configured for switching to a first switching position wherein the electronic attenuator is connected between the signal source and the output, and a second switching position wherein a direct bypass line is connected between the signal source and the output, ***so that if a predetermined permitted level is exceeded at the output, the mechanical changeover switch at the output-end disconnects the electronic attenuator from the output, and the mechanical changeover switch at the input-end connects the electronic attenuator to the signal source***" which is not clear whether the bold italic part above is a new switching position or just the further explanation of the first and second switching positions (when both switches are at positions I or II).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. (US 5,862,461) in view of Hashimoto (US 5,793,863).

Regarding claim 1, Yoshizawa et al. disclose an attenuator system for adjusting the output power of an HF signal source, coupled to an output –power setting mechanism, the attenuator system comprising: an electronic attenuator (Fig. 7, #77; Col. 10, lines 46-48), a changeover switch at an input-end of the electronic attenuator (Fig. 7, #72); a changeover switch at an output-end of the electronic attenuator (Fig. 7, #73), and a switchgear for the changeover switches (Fig. 7, #76) is coupled to the output-power setting mechanism of the signal source (Col. 11, lines 41-43) wherein, above a predetermined output power (Col. 11, lines 44-45), the bypass lines is connected between the signal source and output (Col. 11, lines 57-59), and below the predetermined output power, the electronic attenuator is connected between the signal source and output (Col. 11, lines 60-63). Yoshizawa et al. do not specifically disclose the changeover switches are mechanical switches. However, Hashimoto disclose in figure 1, the switches 162 and 163 for selecting between two signal paths can be either mechanical or electrical switches ((column 3, lines 22-28). Therefore, it would have

been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Hashimoto for using mechanical switches to the attenuator system of Yoshizawa et al. as a system design choice serving the same function for switching the signal path.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Hashimoto and further in view of Loehner et al. (US 5,347,239).

Yoshizawa et al. and Hashimoto teach the attenuator system of claim 1 as stated above. Yoshizawa further teaches the direct bypass line is formed as a mechanical attenuator (Col. 10, lines 44-49). Yoshizawa et al. fails to teach that the mechanical attenuator is switched of via mechanical switches between a plurality of attenuation values. However, Loehner et al. teach an attenuation network (Fig. 8) that switches between different attenuation values using mechanical switches (Col. 2, lines 48-49). Therefore, it would have been obvious to one of ordinary skill in the art to use the step attenuator of Loehner et al. with the system of Yoshizawa et al. because it would allow the system to vary the gain with less power consumption.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Hashimoto and further in view of Gattz (US 3,369,096).

Yoshizawa et al. and Hashimoto teach the attenuator system of claim 1 as stated above. Yoshizawa et al. and Hashimoto fail to teach the mechanical changeover switches are bi-stable coaxial relay changeover switches. However, Gattz teaches a

coaxial changeover switch (Col. 1, line 11, 16-17). It would have been obvious to one of ordinary skill in the art to use a coaxial changeover switch as the mechanical changeover switch because the coaxial changeover switch of Gattz will have minimal wear of the mechanical parts, which allows the system to last longer.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Hashimoto and further in view of Tomita et al. (US 6,339,353).

Yoshizawa et al. and Hashimoto teach the attenuator system of claim 1 as stated above. Yoshizawa et al. and Hashimoto fail to teach that the mechanical changeover switches are transfer switches. However, Tomita et al. teaches a changeover switch that is comprised of transfer switches (Fig. 13, #94; Col. 12, lines 17-19). It would have been obvious to one of ordinary skill in the art to use transfer switches in place of the changeover switches because it would allow for a higher, power signal source.

Allowable Subject Matter

8. Claim 7 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Response to Arguments

9. Applicant's arguments filed 02/14/2008 have been fully considered but they are not persuasive.

(i) Claims rejection under 35 U.S.C. 112, second paragraph.

The 112, 2nd paragraph rejection of claims 1-4 has been withdrawn in view of the amendment of claim 1.

Regarding to claim 7, the claim language (i.e., "...the mechanical changeover switches are configured for switching to a first switching position wherein the electronic attenuator is connected between the signal source and the output, and a second switching position wherein a direct bypass line is connected between the signal source and the output, ***so that if a predetermined permitted level is exceeded at the output, the mechanical changeover switch at the output-end disconnects the electronic attenuator from the output, and the mechanical changeover switch at the input-end connects the electronic attenuator to the signal source***") is still not clear. It is suggested that in order to clarify the mechanical changeover switches to work the way the Applicant explains in the Applicant's remarks, the phrase "**and**" before "**a second switching position**" should be deleted, and "**so that**" before "**if a predetermined permitted level**" should be changed to "**and**".

(ii) Claims rejection under 35 U.S.C. 103(a).

Regarding claim 1, Applicant argues that Yoshizawa et al. fail to disclose coupling an output-power setting mechanism of the signal source to the switchgear. The examiner, however, does not agree with the Applicant. Yoshizawa et al. (column 11, lines 41-50) disclose the control circuit 76 gets transmission power data "A" and reference level "B" and compares the two for controlling the switches. The reference level "B" is the output-power setting level and the source which provides the reference level "B" reads on the output-power setting mechanism. It is reminded that although the

claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding claim 7, Applicant's argument is persuasive, therefore, the rejection of claim 7 under 35 U.S.C. 103 (a) has been withdrawn.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B. Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

Art Unit: 2618

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quochien B Vuong/
Primary Examiner, Art Unit 2618